

**UNIVERSITY OF MINNESOTA
CURRICULUM VITAE**

PERSONAL

1. DATE:	February 15, 2004
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6. ACADEMIC RANK:	Associate Professor
7. DEPARTMENT:	Ophthalmology
8. CITIZENSHIP:	---
9. VISA TYPE:	N/A

HIGHER EDUCATION

10. INSTITUTIONAL:

National Taiwan University, Taipei, Taiwan; --- **BS**, --.

School of Medicine, National Taiwan University, Taipei, Taiwan; ---, **MD**, ---.

School of Hygiene and Public Health, Johns Hopkins University, Baltimore, MD; **MPH**, ---.

11. NON-INSTITUTIONAL:

- *Research Fellow*, Department of Dermatology, Johns Hopkins University School of Medicine, Baltimore, MD.
- *Postdoctoral Fellow*, Division of Biophysics, Johns Hopkins University School of Hygiene and Public Health, Baltimore, MD.
- *Research Fellow*, Department of Ophthalmology, Harvard Medical School, Boston, MA.
Research Associate, Eye Research Institute of Retina Foundation, Boston, MA.
- *Research Fellow*, Department of Ophthalmology, Bascom Palmer Eye Institute, University of Miami School of Medicine, Miami, FL.
- *Resident in Ophthalmology*, Bascom Palmer Eye Institute, University of Miami, Miami, FL.
- *Clinical Fellow*, Cornea and External Disease Service, Bascom Palmer Eye Institute, University of Miami, Miami, FL.

12. CERTIFICATION, LICENSURE:

American Board of Ophthalmology ---

ECFMG (Educational Commission for Foreign Medical Graduates) #---

VQE (Visa Qualifying Exam by ECFMG) #---

FLEX (Federal License Exam by Georgia) #---

Florida Medical License #----

California Medical License #---

Minnesota Medical License #---

FDA IND (Investigational New Drug of intravenous rose bengal) #---

US Trademark (Oblique Keratotomy, OK) #---

US Patent (Secretory Products of Human Lacrimal Gland Acinar Epithelia for Tear Replacement) #---
US Patent (Non-preserved Topical Corticosteroid for Treatment of Dry Eye) #---

EXPERIENCE

13. ACADEMIC:

- 1990-91 *Clinical Fellow*, Cornea and External Disease Service, Bascom Palmer Eye Institute, University of Miami, Miami, FL
1991-97 *Assistant Professor*, Bascom Palmer Eye Institute, University of Miami, Miami, FL.
1997-00 *Associate Professor*, Bascom Palmer Eye Institute, University of Miami, Miami, FL.
1997-00 *Active Staff*, Anne Bates Leach Eye Hospital, Bascom Palmer Eye Institute, University of Miami, Miami, FL
2000- *Director*, Cornea/External Disease and Refractive Surgery, Department of Ophthalmology, University of Minnesota, Minneapolis, MN
2000- *Associate Medical Director*, Minnesota Lions Eye Bank, Minneapolis, MN
2000- *Associate Professor*, Department of Ophthalmology, University of Minnesota, Minneapolis, MN
2000- ***Lyon Chair of Ophthalmology***, University of Minnesota, Minneapolis, MN

14. NON-ACADEMIC: None

15. MILITARY: None

PUBLICATIONS

16. BOOKS AND MONOGRAPHS PUBLISHED:

1. Huang AJW, Tseng SCG, Kenyon KR. Treatment of Ocular Surface Disease. In Corneal Surgery: Theory Technique and Tissue. Ed. Brightbill FS, CV Mosby, pp.593-602, 1986.
2. Huang AJW, Pflugfelder SC. Nocardial and Actinomycotic Keratitis. In Ocular Infection and Immunity. Eds. Pepose JS, Holland GN, Wilhelmus KR, CV Mosby, pp.1043-1047, 1996.
3. Huang AJW, Li CH, Hernandez E. Modulation of corneal vascularization by conjunctivalization. In Advances in Corneal Research. Ed. Lass JH, Plenum, pp.437-438, 1999.
4. Huang AJW. Corneal Topography. In The University of Miami Bascom Palmer Eye Institute Atlas of Ophthalmology. Ed. Parrish RK II, Current Medicine, pp.19-24, 1999.
5. Forster RK, Huang AJW, Cruz OA. Inflammation of Cornea and Conjunctiva. In The University of Miami Bascom Palmer Eye Institute Atlas of Ophthalmology. Ed. Parrish RK II, Current Medicine, pp.55-63, 1999.
6. Vitiello V, Huang AJW. Gram-Positive Aerobic Rods. In Biomedical Foundations of Ophthalmology. Eds. Duane TD, Jaeger EA. Harper & Row, Vol 2, Chapter 51, pp. 1-7, 2001.
7. Wichiensin P, Huang AJW. Postsurgical Corneal Edema. In Ophthalmology Review: A Case Study Approach. Eds. Singh K, Smiddy WE, Lee AG. Thieme Medical Publishers. Chapter 10, pp.36-40, 2001.
8. Yen M, Yang MC, Huang AJW, Pflugfelder SC. Surgical Therapy for Corneal Epithelial Stem Cell Deficiency in Dry Eye and the Ocular Surface - A Unified Approach. Eds. Pflugfelder SC, Beuerman R, Stern M. Marcel Dekker, Inc. Chapter 17, pp. 369-390., 2004.
9. Huang AJW. Immunosuppressive Therapy in Dry Eye and the Ocular Surface - A Unified Approach. Eds. PflugfelderSC, Beuerman R, Stern M. Marcel Dekker, Inc. Chapter 18, pp.391-419, 2004.

17. REFEREED OR JURIED JOURNAL ARTICLES:

1. Tseng SCG, Jarvinen MI, Nelson WG, Huang AJW, Woodcock-Mitchell J, Sun TT. Correlation of specific keratin antigens with different types of epithelial differentiation: Monoclonal antibody studies. *Cell* 30:361-372, 1982.
2. Tseng SCG, Hatchell D, Tierney N, Huang AJW, Sun TT. Expression of specific keratin markers by rabbit corneal, conjunctival, and esophageal epithelia during vitamin A deficiency. *J Cell Biol* 99:2279-2286, 1984.
3. Sun TT, Tseng SCG, Huang AJW, Cooper D, Schemer A, Lynch MH, Weiss R, Eichner R. Monoclonal antibody studies of mammalian epithelial keratins: A review. *Ann NY Acad Sci* 455:307-329, 1985.
4. Tseng SCG, Huang AJW, Sutter D. Purification and partial characterization of rabbit ocular mucin. *Invest Ophthalmol Vis Sci* 28:1473~1482, 1987.
5. Huang AJW, Tseng SCG. Development of monoclonal antibodies to rabbit ocular mucin. *Invest Ophthalmol Vis Sci* 28:1483-1491, 1987.
6. Huang AJW, Tseng SCG, Kenyon KR. Morphogenesis of conjunctival goblet cells in the rat. *Invest Ophthalmol Vis Sci* 29:969-975, 1988.
7. Huang AJW, Watson BD, Hernandez E, Tseng SCG. Photothrombosis of corneal neovascularization by intravenous rose bengal and argon laser irradiation. *Arch Ophthalmol* 106:680-687, 1988.
8. Huang AJW, Watson BD, Hernandez E, Tseng SCG. Induction of conjunctival transdifferentiation by photothrombotic occlusion of corneal neovascularization. *Ophthalmology* 95:228-235, 1988.
9. Gilbard JP, Huang AJW, Belldegrun R, Lee JS, Rossi SR, Gray KL. Open-label crossover study of vitamin A ointment as a treatment for keratoconjunctivitis sicca. *Ophthalmology* 96:244-246, 1989.
10. Huang AJW, Belldegrun R, Hanninen LA, Tseng SCG, Kenyon KR, Refojo MF. Effects of hypertonic solutions on conjunctival epithelium and mucin discharge. *Cornea*, 8:15-20, 1989.
11. Huang AJW, Tseng SCG, Kenyon RK. Pharmacologic therapy for ocular surface diseases. *Ophthalmol Clin of North America*, 2:39-50, 1989.
12. Huang AJW, Tseng SCG, Kenyon KR. Paracellular permeability of corneal and conjunctival epithelia. *Invest Ophthalmol Vis Sci*, 30:684-689, 1989.
13. Huang AJW, Tseng SCG, Kenyon KR. Alteration of epithelial paracellular permeability during corneal epithelial wound healing. *Invest Ophthalmol Vis Sci* 31:429-435, 1990.
14. Pflugfelder SC, Huang AJW, Schuchovski PT, Pereira IC, Tseng SCG. Conjunctival cytological features of primary Sjogren's syndrome. *Ophthalmology* 97:985-991, 1990.
15. Pflugfelder SC, Huang AJW, Crouse C. Epstein-Barr virus keratitis following a chemical facial peel. *Am J Ophthalmol* 110:571-573, 1990.
16. Tseng SCG, Chen JJY, Huang AJW, Kruse FE, Maskin SL, Tsai UF. Classification conjunctival surgeries for corneal disease based on stem cell concept. *Ophthalmol Clin of North America*, 32:595-610, 1990.
17. Huang AJW, Tseng SCG. Corneal epithelial wound healing in the absence of limbus. *Invest Ophthalmol Vis Sci* 32:96-105, 1991.
18. Huang AJW, Tseng SCG, Kenyon KR. Change of paracellular permeability of ocular surface epithelium

- by vitamin A deficiency. Invest Ophthalmol Vis Sci 32:633-639,1991.
19. Huang AJW, Tseng SCG, Kenyon KR. Letters to the Editor. In reply regarding paracellular permeability of ocular surface epithelia. Invest Ophthalmol Vis Sci 32:2163-2165, 1991.
 20. Simon MW, Miller D, Pflugfelder SC, Murchinson FJ, Huang AJW, Atherton SS. Comparison of immunocytology to tissue culture for diagnosis of presumed herpesvirus dendritic epithelial keratitis. Ophthalmology 99:1408-1413, 1992.
 21. Culbertson WW, Huang AJW, Mandelbaum SH, Pflugfelder SC, Boozalis GT, Miller D. Effective treatment of phlyctenular keratoconjunctivitis with oral tetracycline. Ophthalmology 100:1358-1366, 1993.
 22. Sellitti TP, Huang AJW, Schiffman J, Davis JL. Association of herpes zoster ophthalmicus with acquired immunodeficiency syndrome and acute retinal necrosis. Am J Ophthalmol 116:297-301, 1993.
 23. Hummer J, Gass JDM, Huang AJW. Conjunctival Kaposi's sarcoma treated with Interferon alpha-2a. Am J Ophthalmol 116:502-503, 1993.
 24. Santos CI, Huang AJW, Foster CS, Friedlander M, McCulley JP. Efficacy of Iodoxamide 0.1% ophthalmic solution in resolving corneal epitheliopathy with vernal keratoconjunctivitis. Am J Ophthalmol 117:488-497, 1994.
 25. Tu EY, Culbertson WW, Pflugfelder SC, Huang AJW, Chodash JC. Therapy of non-necrotizing anterior scleritis with subconjunctival corticosteroid injection. Ophthalmology 102:718-724, 1995.
 26. Jager MJ, Chodosh J, Huang AJW, Alfonso EC, Culbertson WW, Forster RK. Aspergillus niger as an unusual cause of scleritis and endophthalmitis. Br J Ophthalmol 78:584-586, 1995.
 27. Gupta A, Monroy D, Ji Z, Yoshino K, Huang AJW. Pflugfelder SCP. Transforming growth factor beta-1 and beta-2 in human tear fluid. Curr Eye Res 15:605-614, 1996.
 28. Huang AJW, Li CH, Bourguignon LYW, Chen YW. Co-expression of bcl-2 and CD44s in basal layers of human ocular surface epithelia. Lacrimal Gland, Tear Film and Dry Eye Symposium 2. Adv Exp Med Biol 438:527-531, 1998.
 29. Ford J, Huang AJW, Pflugfelder SCP, Forster RK, Alfonso EA, Miller D. Nontuberculous mycobacterial keratitis in south Florida. Ophthalmology 105:1652-1658, 1998.
 30. Alexandrakis G, Huang AJW, Miller D. Amebic keratitis due to Vahlkampfia infection following corneal trauma. Arch Ophthalmol 116:950, 1998.
 31. Liu Z, Huang AJ, Pflugfelder SC. Evaluation of corneal thickness and topography in normal eyes using the Orbscan corneal topography system. Br J Ophthalmol 83:774-778, 1999.
 32. Wichiensin P, McDonough RL, Huang AJW, Flynn HW. Tissue adhesive in the management of leaking pars plana sclerotomy causing hypotony and choroidal detachment. Arch Ophthalmol 119:135-137, 2001.
 33. Solomon A, Karp CL, Miller D, Dubovy SR, Huang AJW, Culbertson WW. Mycobacterium interface keratitis after laser in situ keratomileusis. Ophthalmology 108:2201-2208, 2001.
 34. Kobayashi A, Shirao Y, Takata Y, Wajima R, Nonomura A, Huang AJW. Adult-onset limbal juvenile xanthogranuloma. Arch Ophthalmol 120:96-97, 2002.
 35. Alfonso EC, Batatt L, Kim M, Vroman D, Rosas A, Culbertson W, Huang AJW, Pflugfelder S, Tseng S, Forster R, Karp C, Yoo S. Infections following refractive surgeries: risk factors, prevention and review of cases. Ann Inst Barraquer, (Barc) 31, 3:391-397, 2002.

36. Souza PMF, Holland EJ, Huang AJW. Bilateral herpetic keratoconjunctivitis. Ophthalmology 110:493-496, 2003.
37. Karp CL, Tuli SS, Yoo SH, Vroman DT, Alfonso EC, Huang AJW, Pflugfelder SC, Culbertson WW. Infectious keratitis after LASIK. Ophthalmology 110:503-510, 2003.
38. Sawada Y, Fischer JL, Verm AM, Harrison AR, Yuan C, Huang AJW. Detection by impression cytology of conjunctival intraepithelial invasion from eyelid sebaceous cell carcinoma. Ophthalmology 110:2045-2050, 2003.
39. Kobayashi A, Wajima R, Sugiyama K, Nonomura A, Huang AJW. Idiopathic limbal squamous metaplasia. Arch Ophthalmol 121:1473-1475, 2003.
40. Wall V, Yen MT, Yang MC, Huang AJW, Pflugfelder SC. Management of the late ocular sequelae of Stevens-Johnson syndrome. The Ocular Surface 1, 4:192-201, 2003.
41. Sawada Y, Yuan C, Huang AJW. Impression cytology in the diagnosis of acanthamoeba keratitis with surface involvement. Am J Ophthalmol 137:323-328, 2004.
42. Yuan C, Reuland MJ, Lee, L, Huang AJW. Optimized expression and refolding of human keratoepithelin in BL21(DE3). Protein Expr Purif 35:39-45, 2004.
43. Yuan C, Yang MC, Zins EJ, Boehlke CS, Huang AJW. Identification of the promoter region of *bigh3* gene. Mol Vis 10: XX-XX, 2004.
44. Boehm MD, Huang AJW. Treatment of recurrent corneal and conjunctival intraepithelial neoplasia with topical interferon alpha-2B. Ophthalmology (in press, 2004).
45. Yang MC, Huang AJW. Bilateral conjunctival nodules: an unusual presentation of Vogt-Koyanagi-Harada syndrome. Arch Ophthalmol (in press, 2004).
46. Kobayashi A, Sugiyama K, Huang AJW. *In vivo* confocal microscopy in the patients with central corneal cloudy dystrophy of Francois. Arch Ophthalmol (in press, 2004).

18. ABSTRACTS AND OTHER PUBLICATIONS:

1. Sun TT, Tseng SCG, Nelson W, Jarvinen M, Woodcock-Mitchell J, Huang AJW. Tissue distribution of keratin antigens: Studies using monoclonal antibodies. Invest Ophthalmol Vis Sci 22(ARVO Suppl):73, 1982.
2. Tseng SCG, Huang AJW, Sun TT. Development changes in keratin antigens of skin and corneal epithelia. Invest Ophthalmol Vis Sci 22(ARVO Suppl): 73, 1982.
3. Tseng SCG, Huang AJW, Hatchell DL, Sun TT. A keratinization assay for xerophthalmia. Ophthalmology 89(9S):193, 1982.
4. Sun TT, Tseng SCG, Nelson WG, Huang AJW, Jarvinen MI, Woodcock-Mitchell J, Bonitz P, Santana H. Tissue distribution of epidermis related keratin antigens: monoclonal antibody studies. J Cell Biol 95:231a, 1982.
5. Tseng SCG, Huang AJW, Hatchell DL, Sun TT. Specific keratins as molecular markers for keratinization. J Cell Biol 95:231a, 1982.
6. Huang AJW, Hoffman GJ, Kan LS, Lesko SA, Ts'o POP. A comprehensive investigation on base/sequence

specific anti-DNA monoclonal antibodies. Fed Proc 43:1773, 1984.

7. Belldegrun R, Huang AJW, Hanninen L, Kenyon KR, Gilbard IP, Refojo MF. Effects of hypertonic solutions on conjunctival epithelium and mucin discharge. Invest Ophthalmol Vis Sci 26(ARVO Suppl): 13, 1985.
8. Gilbard JP, Huang AJW, Tseng SCG, Rossi S, Gray K, Hanninen L. A rabbit model for keratoconjunctivitis sicca. Invest Ophthalmol Vis Sci 26(ARVO Suppl): 14, 1985.
9. Huang AJW, Tseng SCG, Kenyon KR. An in vitro perfusion study of rabbit corneal and conjunctival permeability. Invest Ophthalmol Vis Sci 26(ARVO Suppl): 15, 1985.
10. Tseng SCO, Huang AJW, Kenyon KR. Differential impression cytology in keratoconjunctivitis sicca and blepharitis. Invest Ophthalmol Vis Sci 26(ARVO Suppl): 173, 1985.
11. Kenyon KR, Huang AJW, Tseng SCG, Gipson IK. Morphogenesis of conjunctival goblet cells in the rat. Invest Ophthalmol Vis Sci 26(ARVO Suppl): 174, 1985.
12. Vidaurri LJ, Huang AJW, Tseng SCG. Pharmacokinetics of topical tretinoin in normal rabbit eyes. Invest Ophthalmol Vis Sci 27(ARVO Suppl): 27, 1986.
13. Tseng SCG, Huang AJW, Stter DJ. Purification and characterization of rabbit ocular mucin. Invest Ophthalmol Vis Sci 27(ARVO Suppl): 27, 1986.
14. Huang AJW, Tseng SCG, Farazdaghi M, Kenyon KR. Modulation of paracellular permeability during corneal epithelial wound healing. Invest Ophthalmol Vis Sci 27(ARVO Suppl): 54, 1986.
15. Huang AJW, Tseng SCG, Kenyon KR. Cytological staging as prognostic index of ocular surface morbidity in keratoconjunctivitis sicca. Ophthalmology 93(8S): 113, 1986.
16. Huang AJW, Tseng SCG. Modulation of paracellular permeability of ocular surface epithelium by retinoids. Proc Int'l Soc Eye Res IV: 186, 1986.
17. Huang AJW, Watson BD, Hernandez E, Tseng SCG. Induction of conjunctival transdifferentiation by photothrombosis with rose bengal and argon laser. Invest Ophthalmol Vis Sci 28(ARVO Suppl): 159, 1987.
18. Ocon M, Huang AJW, Tseng SCG. Identification of mucin-associated proteins: possible functional roles. Invest Ophthalmol Vis Sci 28(ARVO Suppl): 159, 1987.
19. Pflugfelder SC, Lau H, Huang AJW, Tseng SCG. A tissue survey of mucin antigen expression. Invest Ophthalmol Vis Sci 28(ARVO Suppl): 159, 1987.
20. Huang AJW, Watson BD, Hernandez E, Tseng SCG. A new phototherapeutic treatment for corneal neovascularization. Ophthalmology 94(10S): 126, 1987.
21. Trentacoste J, Thompson K, Huang AJW, Watson B. Treatment of lipid keratopathy using excimer and argon lasers. Invest Ophthalmol Vis Sci 29(ARVO Suppl): 39, 1988.
22. Huang AJW, Tseng SCG. Corneal epithelial wound healing in the absence of limbal epithelium. Invest Ophthalmol Vis Sci 29(ARVO Suppl): 190, 1988.
23. Huang AJW, Alfonso B, Pflugfelder SC, Holland S, Tseng SCG, Rosenwasser GT, Dabbs CK, Miller D, Sanders N. Clinical features and management of atypical mycobacterial keratitis. Ophthalmology 95(9S): 146, 1988.

24. Huang AJW, Tseng SCG, Hernandez E, Watson BD. Studies of epithelial differentiation of conjunctival flaps. *Invest Ophthalmol Vis Sci* 30(ARVO Suppl): 520, 1989.
25. Pflugfelder SC, Huang AJW, Schuchovski PF, Tseng SCG. Cytologic features of immune mediated aqueous tear deficiency and blepharitis. *Invest Ophthalmol Vis Sci* 30(ARVO Suppl): 522, 1989.
26. Huang AJW, Roussel TJ, Pflugfelder SC, Holland SP, Jacobson SG, Tseng SCG. Systemic vitamin A treatment for squamous metaplasia in chronic alcoholism. *Ophthalmology* 96(9S): 122, 1989.
27. Schuchovski PS, Pflugfelder SC, Huang AJW, Pereira IC, Tseng SCG. Cytologic features of immune-mediated aqueous tear deficiency and blepharitis. XXV Brazilian Congress of Ophthalmology and XVII Pan-American Congress of Ophthalmology Sep 3-6, 1989.
28. Huang AJW, Tseng SCG. Phenotypic alterations of conjunctival flaps on corneal surface by photothrombosis. *Invest Ophthalmol Vis Sci* 31(ARVO Suppl): 468, 1990.
29. Simon MW, Miller D, Pflugfelder SC, Murchinson SF, Huang AJW, Atherton SS. Immunohistochemical identification of herpesvirus antigens in impression cytology of dendritic keratitis. *Invest Ophthalmol Vis Sci* 32(ARVO Suppl): 805, 1991.
30. Miller D, Diaz M, Jarrett S, Perez E, Pflugfelder S, Huang AJW. Enhanced detection of ocular pathogens using impression cytology (IC), biological and fluorescent stains. *Invest Ophthalmol Vis Sci* 32(ARVO Suppl): 805, 1991.
31. Huang AJW, Tseng SCG, Hernandez E. Inhibition of corneal vascularization by lamellar keratoplasty in limbal deficient corneas. *Invest Ophthalmol Vis Sci* 32(ARVO Suppl): 844, 1991.
32. Huang AJW, Hernandez E. Modulation of corneal vascularization by traumatized basement membrane. *Invest Ophthalmol Vis Sci* 33(ARVO Suppl): 892, 1992.
33. Culbertson WW, Huang AJW, Mandelbaum SH, Pflugfelder SC, Boozalis GT, Miller D. Effective treatment of phlyctenular keratoconjunctivitis with oral tetracycline. *Ophthalmology* 99(9S): 115, 1992.
34. Huang AJW, Thio IM, Hernandez E. Modulation of corneal vascularization by conjunctival epithelium. *Invest Ophthalmol Vis Sci* 34(4): 822, 1993.
35. Thio IM, Mui MM, Huang AJW. Characterization of epithelial outgrowth from vascularized corneal explants. *Invest Ophthalmol Vis Sci* 34(4): 1010, 1993.
36. Santo CI, Huang AJW, Hartwich-Young R, Drake M, Von Tress M, Turner FD. Efficacy of Alomide (1odoxamide 0.1% ophthalmic solution) in resolving corneal epitheliopathy in vernal keratoconjunctivitis (VKC). *Invest Ophthalmol Vis Sci* 34(4): 1492, 1993.
37. Kim JE, Huang AJW, Alfonso EC, Miller D. Endophthalmitis following penetrating keratoplasty associated with contaminated donor rim. *Invest Ophthalmol Vis Sci* 34(4): 1494, 1993.
38. Kim JE, Huang AJW, Alfonso EC, Miller D. Endophthalmitis following penetrating keratoplasty associated with contaminated donor rim. *Ophthalmology* 100(9S): 66, 1993.
39. Huang AJW, Kim JE, Culbertson WW, Pflugfelder SC, Miller D. Diagnosis and treatment of Acanthamoeba keratitis. *Ophthalmology* 100(9S): 68, 1993.
40. Huang AJW, Takesue Y, Lee W, Barquet G, Simon G. Comparisons between oblique keratotomy a radial keratotomy. Proceeding 180, 1993. First International Symposium of Ophthalmology, September 9-11, 1993.

41. Huang AJW, Yu K, Yoshino K, Pflugfelder SC. Regulation of conjunctival differentiation and corneal vascularization. *Invest Ophthalmol Vis Sci* 35(4): 1559, 1994.
42. Fishburne BC, Huang AJW, Miller D. The diagnosis and management of non-tuberculous mycobacterial keratitis. *Invest Ophthalmol Vis Sci* 35(4): 1677, 1994.
43. Huang AJW. Recognition and treatment of acute retinal necrosis. *Ophthalmology* 101(9A): 72, 1994.
44. Huang AJW, Pflugfelder SC, Forster RK, Tseng SCG, Woods D, Miller D. Diagnosis and management of nocardia keratitis. *Ophthalmology* 101(9A): 126, 1994.
45. Huang AJW, Monoroy DC, Yu K. Expression of transforming growth factor-beta 2 in cultured ocular surface epithelia. *Invest Ophthalmol* 36(4): S178, 1995.
46. Gupta SK, Huang AJW. Expression of a transforming growth factor-beta 2 related protein in cultured ocular surface epithelia. *Invest Ophthalmol* 36(4): S570, 1995.
47. Muniz AM, Sredni D, Yoshino K, Huang AJW. Response of human and rabbit limbal epithelia to transforming growth factor-beta 1. *Invest Ophthalmol* 36(4): S570, 1995.
48. Lee W, Denham DB, Nose I, Matsui T, Soderberg PG, Takesue Y, Sasoh M, Yamanaka A, Hostyn P, Matsui K, Barraquer R, Huang AJW, Parel J-M. Mechanical phaco-ablation (MPA). *Invest Ophthalmol* 36(4): S808, 1995.
49. Miller MP, Huang AJW, Pflugfelder SC, Miller D. Paecilomyces keratitis and endophthalmitis. *Ophthalmology* 102(9A): 155, 1995.
50. Miller D, Laird K, Huang AJW, Pflugfelder S, Alfonso E. Laboratory detection of ocular microsporidia. *Invest Ophthalmol* 37(3): S318, 1996.
51. Grajewski AL, Hodapp E, Sawelson H, Huang AJW. Intraocular pressure measurement following ALK. *Invest Ophthalmol* 37(3): S321 1996.
52. Huang AJW, Li CH, Lau H, Pena J. Expression of bcl-2 in human ocular surface epithelia. *Invest Ophthalmol*. 37(3): S452, 1996.
53. Li CH, McConnell J, Garcia J, Hernandez E, Huang AJW. Expression of vascular endothelial growth factor in rabbit ocular surface epithelia. *Invest Ophthalmol* 37(3): S863, 1996.
54. Huang AJW, Pflugfelder SC, Alfonso EC. Impression cytology of unusual ocular surface diseases. *Ophthalmology* 103(9A): 169, 1996.
55. Huang AJW, Li CH, Hernandez E. Modulation of corneal vascularization by conjunctivalization. World Congress on the Cornea IV, proceeding: 35, 1996.
56. Li CH, Huang AJW, Chen YW, Bourguignon LYW. Co-expression of bcl-2 and CD-44s in basal layers of normal limbus and conjunctiva. *Invest Ophthalmol* 38(4): S400, 1997.
57. Bourguignon LYW, Mathew L, Zhu HB, Li CH, Huang AJW. Role of the cytoskeleton in regulating redistribution of IP3 receptor-subtypes 1, 2 and 3 during limbal microvascular endothelial cell activation. *Invest Ophthalmol* 38(4): S701, 1997.
58. Leon CR, Alfonso E, Tseng SCG, Fantes F, Huang AJW, Pflugfelder S, Forster IL, Culberson W. Corneal topography criteria for selective suture removal after penetrating keroplasty. *Invest Ophthalmol* 38(4): S1091, 1997.

59. Huang AJW, Li CH, Pena J, Hernandez E. Differential apoptosis among ocular surface epithelia. *Invest Ophthalmol* 38(4): S1145, 1997.
60. Huang AJW, Li CH, Hernandez E, Lau H, Pena J. Quantification of bcl-2 and Fas (CD 95) in ocular surface epithelia. *Invest Ophthalmol* 39(4): S 947, 1998.
61. Li CH, Huang AJW, Chen YW, Bourguignon LYW. Co-expression of bFGF, VEGF and CD44 in vascularized corneas. *Invest Ophthalmol* 39(4): S3420, 1998.
62. Battat L, Miller D, Huang AJW. Colletotrichum keratitis in southern florida. *Invest Ophthalmol* 40(4): S552, 1999.
63. Wichiensin P, Kobayashi A, Okata I, Hernandez E, Huang AJW. Expression of bcl-2 and related oncoproteins in the ocular surface epithelia of bcl-2 transgenic and knockout mice. *Invest Ophthalmol* 40(4): S984, 1999.
64. Huang AJW, Li DQ, Hernandez E. Up-regulation of collagenases (MMP-1 and -13) and gelatinases (MMP-2 and -9) in vascularized rabbit corneal epithelium. *Invest Ophthalmol* 41(4): S832, 2000.
65. Huang AJW, Li DQ, Shang TY, Dursun D. Expression of matrix metalloproteinases (MMPS) in vascularized and transdifferentiated rabbit corneal epithelia. *Invest Ophthalmol* 42(4): S123, 2001.
66. Uttley SA, Lawrence MG, Hardten DR, Dovrak JA, Djalilian AR, Huang AJW. Methylene blue-associated corneal decompensation. *Ophthalmol* 108(10A): 117, 2001.
67. Huang AJW, Shang TY, Li DQ. Cytokine regulation of metalloproteinases expression in cultured rabbit corneal epithelial cells. *Invest Ophthalmol* 43(S): 65, 2002.
68. Boehlke CS, Yuan C, Sawada Y, Huang AJW. Distribution of G proteins and RGS proteins on ocular surface epithelia. *Invest Ophthalmol* 43(S): 65, 2002.
69. Yuan C, Sawada Y, Boehlke CS, Adams G, Huang AJW. Growth of epidermal keratinocytes on human amniotic membrane. *Invest Ophthalmol* 43(S): 66-7, 2002.
70. Cox CA, Flynn JT, Sawada Y, Huang AJW. Impression cytology used to diagnose benign hereditary intraepithelial dyskeratosis. *Invest Ophthalmol* 43(S): 128, 2002.
71. Sawada Y, Yuan C, Huang AJW. Lipid supplements support the growth of corneal and epidermal epithelial cells in serum-free culture system. *Invest Ophthalmol* 43(S): 6, 2002.
72. Huang AJW. Pseudopterygium: Idiopathic limbal deficiency. 7th International Ocular Surface Society. Proceeding: 12, 2002
73. Huang AJW, Skolnick CA. Lamellar sclerokeratoplasty for ocular surface reconstruction. The 2nd Global Chinese Ophthalmic Conference. Abstract Book: 29, 2002.
74. Yuan C, Huang AJW. Suppressing the expression of keratoepithelin (BIGH3) in cultured cells by small interfering RNAs (siRNA).Program Summary Book: 159, 2003.

19. OTHER WORKS ACCEPTED FOR PUBLICATIONS:

1. Unpublished at this time and deleted.
2. Unpublished at this time and deleted.

PROFESSIONAL

20. FUNDED RESEARCH PERFORMED:

- 1987-88 Principal Investigator, ---
Photothrombosis of Corneal Neovascularization by Treatment with Argon Laser and Intravenous Rose Bengal.
- 1988 Principal Investigator, Contract grant, ---
Clinical Efficacy of Topical Tretinoin for Dry Eye Disorders.
- 1991-92 Co-Investigator, Contract grant ----
Clinical Trial of Sandimmune 1% Ophthalmic Ointment for Keratoconjunctivitis Sicca. (P.I.----).
- 1991-92 Principal Investigator, Contract grants ---
Efficacy and Safety Evaluation of Lodoxamide 0.1 % Ophthalmic Solution Versus Placebo in Vernal Keratoconjunctivitis.
- 1993-96 Principal Investigator, Orphan Products Development Grant ---
Photothrombotic Treatment for Corneal Neovascularization.
- 2002-03 Principal Investigator, ---
Structural and Functional Analyses of Keratoepithelin.
- 2003-05 Principal Investigator, ---
Molecular Therapy for Myocilin-Related Glaucoma. ---
- 2003-04 Principal Investigator, ---
Molecular Therapy for Myocilin-Related Glaucoma. ---
- 2003-04 Principal Investigator, ---
Molecular Therapy for BIGH3-Related Corneal Dystrophies. ---
- 2003-04 Principal Investigator, ----
Molecular Therapy for Myocilin-Related Glaucoma. ---

21. EDITORIAL RESPONSIBILITIES:

1. Editor and Co-author, Cornea and External Disease (Book 8), Basic and Clinical Science Course, American Academy of Ophthalmology, 1996-2001
2. Reviewer of Ophthalmology
3. Reviewer of Archives of Ophthalmology
4. Reviewer of American Journal of Ophthalmology
5. Reviewer of Current Eye Research
6. Reviewer of Investigative Ophthalmology and Visual Science
7. Reviewer of Cornea
8. Reviewer of AAO External Disease & Cornea, a multimedia program 2000
9. Reviewer of AAO Corneal Dystrophies and Degenerations 2002
10. FDA Ophthalmic Device Panel 2001-present
11. NEI VZN grant review committee 2002

22. PROFESSIONAL AND HONORARY ORGANIZATIONS:

American Academy of Ophthalmology

American Medical Association
Association for Research in Vision and Ophthalmology
Bascom Palmer Alumni Association
Chinese American Ophthalmologists Society
Florida Society of Ophthalmology
Johns Hopkins Alumni Association
Miami Ophthalmology Society
Massachusetts Eye and Ear Infirmary/Harvard Alumni Association

23. HONORS AND AWARDS:

- Dean's list and Book Coupon Scholarship, National Taiwan University
- Best Intern Award, National Taiwan University Hospital
- Graduation with honors, School of Medicine, National Taiwan University
- Graduation with honors, School of Hygiene and Public Health, Johns Hopkins University
- NEI-ARVO Travel Fellowship to attend 1986 Annual ARVO meeting at Sarasota, Florida
- Pharmacia Travel Fellowship for 7th International Congress of Eye Research at Nagoya, Japan
- 1991 Visiting Professor, National Taiwan University Hospital, Department of Ophthalmology, Taipei, Taiwan
- Visiting Professor, Chung-Gung Memorial Hospital, Department of Ophthalmology, Taipei, Taiwan
- 1992 Invited Speaker, VII Congreso Nacional de Oftalmologia en Guatemala, Guatemala City, Guatemala
- 1992 Professor of the Year Award, Bascom Palmer Eye Institute**, Department of Ophthalmology, Miami, FL
- 1993 Invited speaker, II Congreso de Oftalmologia en Colombia, Girardot, Colombia.
- 1994 Visiting Professor, Project Orbis and Qingdao Medical College, Qingdao, People's Republic of China
- 1995 Visiting Professor, Project Orbis and Shantou Medical College, Shantou, People's Republic of China
- 1995 Invited speaker, I Conclave Nacional Omní quirúrgico Ano, San Salvador, El Salvador
- 1996 Invited speaker, World Congress on the Cornea IV, Orlando, Florida
- 1996 Invited speaker, Nacional Congreso de Oftalmologia en El Salvador, San Salvador, El Salvador
- 1996 Visiting Professor, National Taiwan University Hospital, Department of Ophthalmology, Taipei, Taiwan
- 1997 Invited speaker, Annual Meeting of Contact Lens Association of Ophthalmologists, Las Vegas, Nevada
- 1997 Moderator, Annual Meeting of Association of Research for Vision and Ophthalmology, Ft. Lauderdale, FL
- 1997 Honor Award, American Academy of Ophthalmology**, San Francisco, CA
- 1998 Visiting Professor, Mongolia Medical University, Ulan Bator, Republic of Mongolia
- 1998 Visiting Professor, Medical University of Chungqing, Sichuan, People's Republic of China
- 1999 Visiting Professor, University of Yangon Medical College, Yangon, Myanmar
- 2000 Professor of the Year Award, Bascom Palmer Eye Institute**, Department of Ophthalmology, Miami, FL
- 2000 Lyon Chair of Ophthalmology**, University of Minnesota, Minneapolis, MN
- 2000 Visiting Professor, Project Orbis and Qingdao Medical College, Qingdao, People's Republic of China
- 2001 Best Teaching Faculty Award**, University of Minnesota, Department of Ophthalmology, Minneapolis, MN
- 2001 Moderator, Annual Meeting of Association of Research for Vision and Ophthalmology, Ft. Lauderdale, FL
- 2001 FDA Ophthalmic Devices Panel, member of review committee, Rockville, MD
- 2002 Moderator, Annual Meeting of Association of Research for Vision and Ophthalmology, Ft. Lauderdale, FL
- 2002 NEI VZN Special Emphasis Panel, Grant Review Committee, Rockville, MD
- 2002 Visiting Professor, Kellogg Eye Center, University of Michigan, Ann Arbor, MI
- 2003 Visiting Professor, Columbia University, New York, NY

24. POST-DOCTORAL FELLOWSHIPS:

- *Research Fellowship*; Department of Dermatology, School of Medicine, Johns Hopkins University, Baltimore, MD
- *Postdoctoral Fellowship*; Division of Biophysics, School of Hygiene and Public Health, Johns Hopkins University, Baltimore, MD
- *Research Fellowship*; Department of Ophthalmology, Harvard Medical School, Boston, MA
- *Research Associate*; Cornea Unit, Eye Research Institute of Retina Foundation, Boston, MA
- *Research Fellowship*; Department of Ophthalmology, Bascom Palmer Eye Institute, University of Miami School of Medicine, Miami, FL

--- *Clinical Fellowship*; Cornea and External Disease Service, Department of Ophthalmology, Bascom Palmer Eye Institute, University of Miami School of Medicine, Miami, FL

25. OTHER PROFESSIONAL ACTIVITIES:

A. Scientific Presentations at National & International Meetings

American Society for Laser Medicine and Surgery, Seventh Meeting. San Francisco, CA: April 15, 1987. Induction of conjunctival transdifferentiation by phototherombosis with rose bengal and argon laser.

B. Invited Lectures

1. Visiting Professorship, National Taiwan University Hospital, July 9, 1991. Conjunctival epithelial differentiation.
2. Cornea & External Disease Course, Bascom Palmer Eye Institute, Jan 17 & 18, 1992. Photothrombosis and management of corneal neovascularization.
3. Grand Rounds, Bascom Palmer Eye Institute, Feb 27, 1992. Unusual presentation of adolescent phlyctenular keratoconjunctivitis.
4. Ninth Annual Review Course of Internal Medicine, University of Miami, Department of Medicine, May 8, 1992. Ophthalmic manifestation of systemic diseases.
5. VII Congreso Nacional de Oftalmologia en Guatemala, May 28-30, 1992.
 - a. Management of cicatricial conjunctivitis
 - b. AIDS-related external diseases
 - c. Management of sterile corneal ulcer
 - d. Management of unusual infectious keratitis
6. Course Director, Trade Secrets Course, Bascom Palmer Eye Institute, Oct 3, 1992. Problem-solving in external diseases.
7. 23rd Annual Miami Winter Meeting of American Dental Association, Jan 30, 1993. Sjogren's syndrome and dry eyes.
8. Tenth Annual Review Course of Internal Medicine, University of Miami, Department of Medicine, May 7, 1993. Ocular manifestations of systemic disease.
9. 21st Annual Conference of American Academy of Physician Assistants. June 16, 1993. Ocular manifestations of systemic diseases.
10. XIX Congreso Panamericano de Oftalmologia, July 15, 1993. Recent advances in ocular surface diseases.
11. II Congreso de Oftalmologia en Colombia, Aug 14-15, 1993.
 - a. Anterior segment trauma
 - b. Penetrating keratoplasty
12. I Conclave Nacional Ommquisurgio Ano, Sept 27-29, 1995.
 - a. Keratoplastia. indicaciones y tecnicas quirurgicas.refractiva
 - b. Controversia. excimer laser vrs. KR complicaciones
13. Trade Secrets, Bascom Palmer Eye Institute, Dec 2, 1995. Clinical management of corneal vascularization.
14. 22nd Annual Board Review Course in Internal Medicine, University of Miami, Department of Medicine, May 11, 1995. Ocular manifestations of systemic disease.
15. 12th Annual Review Course for Certification in Internal Medicine, University of Miami, Department of Medicine, Aug 4, 1995. Ocular manifestations of systemic disease.
16. World Congress on the Cornea IV. Apr 18, 1996. Modulation of corneal vascularization by conjunctivalization.
17. 23rd Annual Board Review Course in Internal Medicine, University of Miami, Department of Medicine, May 9, 1996. Ocular manifestations of systemic disease.
18. Annual Meeting of Contact Lens Association of Ophthalmologists. Jan 17, 1997. Pathogenesis of corneal vascularization.
19. Bascom Palmer Trade Secrets Course: Ocular Disease in AIDS. Jan 16, 1997. Microsporidial keratitis.
20. IX Congresso Internacional da ABBO e Transplante de Cornea, Brazilian Congress of Ophthalmology. April 18, 1997. Indications and management of corneal transplantation.
21. Annual Safety Workshop of Miami-Dade Fire Rescue Department, April 30, 1997. Anterior Segment Trauma.
22. 24th Annual Board Review Course in Internal Medicine, University of Miami, Department of Medicine, May 8, 1997. Ocular manifestations of systemic disease.

23. 25th Annual Board Review Course in Internal Medicine, University of Miami, Department of Medicine, May 5, 1998. Ocular manifestations of systemic disease.
24. XXVIIIth International Congress of Ophthalmology. June 22, 1998. Corneal Graft Failure on Ocular Surface Disorders.
25. XXth Curso Interamericano. New diagnostic modalities for ocular surface diseases. Nov 18, 1998.
26. 26th Annual Board Review Course in Internal Medicine, University of Miami, Department of Medicine, May 3, 1999. Ocular manifestations of systemic disease.
27. 27th Annual Board Review Course in Internal Medicine, University of Miami, Department of Medicine, May 4, 2000. Ocular manifestations of systemic disease.
28. Visiting Professor, Qingdao Medical College, QingDao, China, Sept. 18, 2002. Recent advances in Ocular surface reconstruction.
29. 40th Anniversary of Bascom Palmer Eye Institute, Feb. 22, 2002. Immunosuppression for ocular surface reconstruction.
30. Eye Meeting of the Twin Cities. April 20, 2002. Lamellar sclerokeratoplasty for ocular surface reconstruction.
31. The 2nd Global Chinese Ophthalmic Conference. June 15, 2002. Recent advance in lamellar keratoplasty.
32. Kellogg Eye Center Visiting Professor Lectures. Sept. 27 & 28, 2002.
 - a. Recent advance in lamellar keratoplasty.
 - b. Lamellar sclerokeratoplasty for ocular surface reconstruction.
33. Columbia University Visiting Professor Lectures. Jan. 23, 2003
 - a. Recent advance in ocular surface disease.
 - b. Recent advance in lamellar keratoplasty.
34. Eye Meeting of the Twin Cities. April 25, 2003. Topical alpha-interferon therapy for recurrent corneal and conjunctival intraepithelial neoplasia.

TEACHING

26. TEACHING AWARDS RECEIVED:

Professor of the Year Award, 1992 Department of Ophthalmology, University of Miami
Honor Award, 1997 American Academy of Ophthalmology
Professor of the Year Award, 2000 Department of Ophthalmology, University of Miami
Best Faculty Teaching Award, 2001 Department of Ophthalmology, University of Minnesota

27. THESIS AND DISSERTATION ADVISING:

Research to Prevent Blindness Annual Student and Postdoctoral Fellowship, member of review committee 2000-03.

SERVICE

28. UNIVERSITY COMMITTEE AND ADMINISTRATIVE RESPONSIBILITIES:

1990-00 Infection control committee, Bascom Palmer Eye Institute, Department of Ophthalmology, University of Miami
 1991-00 Quality Assurance Committee, Bascom Palmer Eye Institute, Department of Ophthalmology, University of Miami
 1997-00 Medical student Admission Committee, University of Miami School of Medicine
 1997-00 Medical Board, Bascom Palmer Eye Institute, University of Miami
 1999-00 Residency Selection Committee, Department of Ophthalmology, Bascom Palmer Eye Institute, University of Miami
 2000- Director of Cornea Fellowship, Department of Ophthalmology, University of Minnesota

34. COMMUNITY ACTIVITIES:

1996 Committee member of AIDS Awareness of Miami-Dade County, Florida
 1998 FDA Orphan Drug Grant Review Committee

1999 FDA Orphan Drug Grant Review Committee
March 2, 1999

2000- ---

2000- Fight for Sight, Prevent Blindness America, member of Fellowships Panel

2001- FDA Ophthalmic Devices Panel, consultant
November 30, 2001
August 1-2, 2002
February 4-5, 2004

2002- NEI Special Emphasis Panel, grant review committee
April 12, 2002 ZEY1 VSN 02
November 10, 2003 ZEY1 VSN 06